

**In the Claims:**

This version of the claims replaces and supercedes all prior versions of the claims.

1. – 10. (Cancelled)

11. (Currently Amended)     A capsule medical device system comprising:

    a capsule medical device inserted into a body cavity;

    an external device for transmitting and receiving data, to and from the capsule medical device, by means of radio communications;

    a storage device, provided in the capsule medical device, the storage contents of which are rewritten on the basis of data parameters transmitted to the capsule medical device from the external device; and

an image acquiring device provided in the capsule medical device which acquires images of the body cavity and operates on the basis of data parameters stored in the storage device;

a detecting circuit provided in the external device for calculating a luminance distribution of the images; and

    a correction amount calculating circuit provided in the external device for generating ~~adjustments to the data parameters transmitted~~ from the luminance distribution calculated by the detecting circuit ~~by the capsule medical device and received by the external device.~~

12. & 13 (Cancelled)

14. (Currently Amended)     The capsule medical system according to claim ~~[[13]]~~ 11, wherein the image acquiring device has an illumination device; and

the illumination device operates on the basis of data parameters stored in the storage device.

15. (Currently Amended) The capsule medical system according to claim ~~[[13]]~~ 11, wherein the image acquiring device has an image sensor; and

the image sensor operates on the basis of data parameters stored in the storage device.

16. (Currently Amended) The capsule medical system according to claim ~~[[13]]~~ 11, wherein the image acquiring device has an image data compressing device; and

the image data compressing device operates on the basis of data parameters stored in the storage device.

17. –23. (Cancelled)

24. (Currently Amended) An operation modifying method for ~~[[a]]~~ operating the capsule medical system of claim 11, ~~comprising a capsule medical device and an external device for transmitting and receiving data, to and from the capsule medical device by means of radio communications~~, the method comprising the steps of:

(a) ~~transmitting data~~ the image captured by the image acquiring device from the capsule medical device;

(b) receiving the image data in the external device;

(c) ~~determining modified data on the basis of this data~~; calculating a luminance distribution of the image in the external device;

(d) calculating a data parameter on the basis of the luminance distribution in the external device;

(e) transmitting the data parameter to the storage device ~~the modified data~~ from the external device; and

~~storing the modified data in a storage device provided in the capsule medical device; and~~  
~~operating the capsule medical device on the basis of the data stored in the storage device~~

(f) rewriting the data parameters in the storage device in the capsule medical device; and

(g) acquiring the image of the body cavity on the basis of the data parameter in the storage device.

25. (Cancelled)

26. (Previously Presented) The capsule medical system according to claim 11, wherein said external device transmits a command for switching an imaging mode based on a position of said capsule medical device in the body cavity.

27. (Currently Amended) The capsule medical system according to claim ~~[[11]]~~ 31, wherein correction amount calculating circuit adjusts color image values and illumination values.

28. (Currently Amended) The capsule medical system according to claim ~~[[11]]~~ 33, wherein correction amount calculating circuit adjusts position data of ~~for~~ an image sensor.

29. (New) The capsule medical system according to claim 11, wherein the correction amount calculating circuit has a reference data which is previously stored and calculates the data parameters on the basis of the reference data.

30. (New) The capsule medical system according to claim 29, wherein said reference data is a histogram of standard luminance distribution positions.

31. (New) The capsule medical system according to claim 11, wherein said detecting circuit is a color balance and brightness detecting circuit for calculating a histogram of brightness in the image.

32. (New) The capsule medical system according to claim 11, wherein said detecting circuit is a color balance and brightness detecting circuit for calculating the luminance distribution of green, blue and red components in the image.
33. (New) The capsule medical system according to claim 15, wherein said detecting circuit is an image position detecting circuit for calculating the luminance distribution of the image which is captured by the image sensor.
34. (New) The capsule medical system according to claim 33, wherein the correction amount calculating circuit calculates an effective imaging range of the image acquiring device from the luminance distribution of the image.
35. (New) The capsule medical system according to claim 33, wherein the correction amount calculating circuit calculates a horizontal start position, a horizontal end position, a vertical start position and a vertical end position for the image sensor on the basis of the luminance distribution of the image.
36. (New) The method of claim 24, wherein steps (a) through (g) are repeated.